

September 2, 2020

Mr. Kyle Rauch
City of Grove City
4035 Broadway
Grove City, Ohio 43123

**Re: Balanced Family Academy – Final Development Plan
Development Narrative / General Supporting Statement**

Mr. Rauch,

Attached herein is our Final Development Plan submission for Balanced Family Academy on Hoover Road (part of the Buckeye Ranch redevelopment).

This proposal contemplates complete site and building development for a new, one-story 10,254 square foot daycare facility. In addition to new parking, pedestrian circulation and building, exterior playground is proposed at the rear of the building (west).

This new facility shall employ approximately 30 employees

It has been recognized by our client that there is a demand for child daycare services in this area. Additionally, this facility will serve as an asset to the newly proposed apartment development proposed on the balance of the property to the west.

Since this is one part of a master redevelopment of the former Buckeye Boys Ranch property, the overall development has been designed with interconnecting access roads and pedestrian paths that link to those of the greater environment.

Architecturally, our proposed building is consistent with the contemporary aesthetic character proposed for the master development. Furthermore, high-quality natural materials have been proposed throughout.

We are excited to work with the City of Grove City and look forward to moving this project forward.

Once you've had a chance to review the materials herein, please contact me with any questions or comments you may have.

Sincerely,



Carter Bean

Date: 8/28/2020

PROJECT:

BALANCED FAMILY ACADEMY

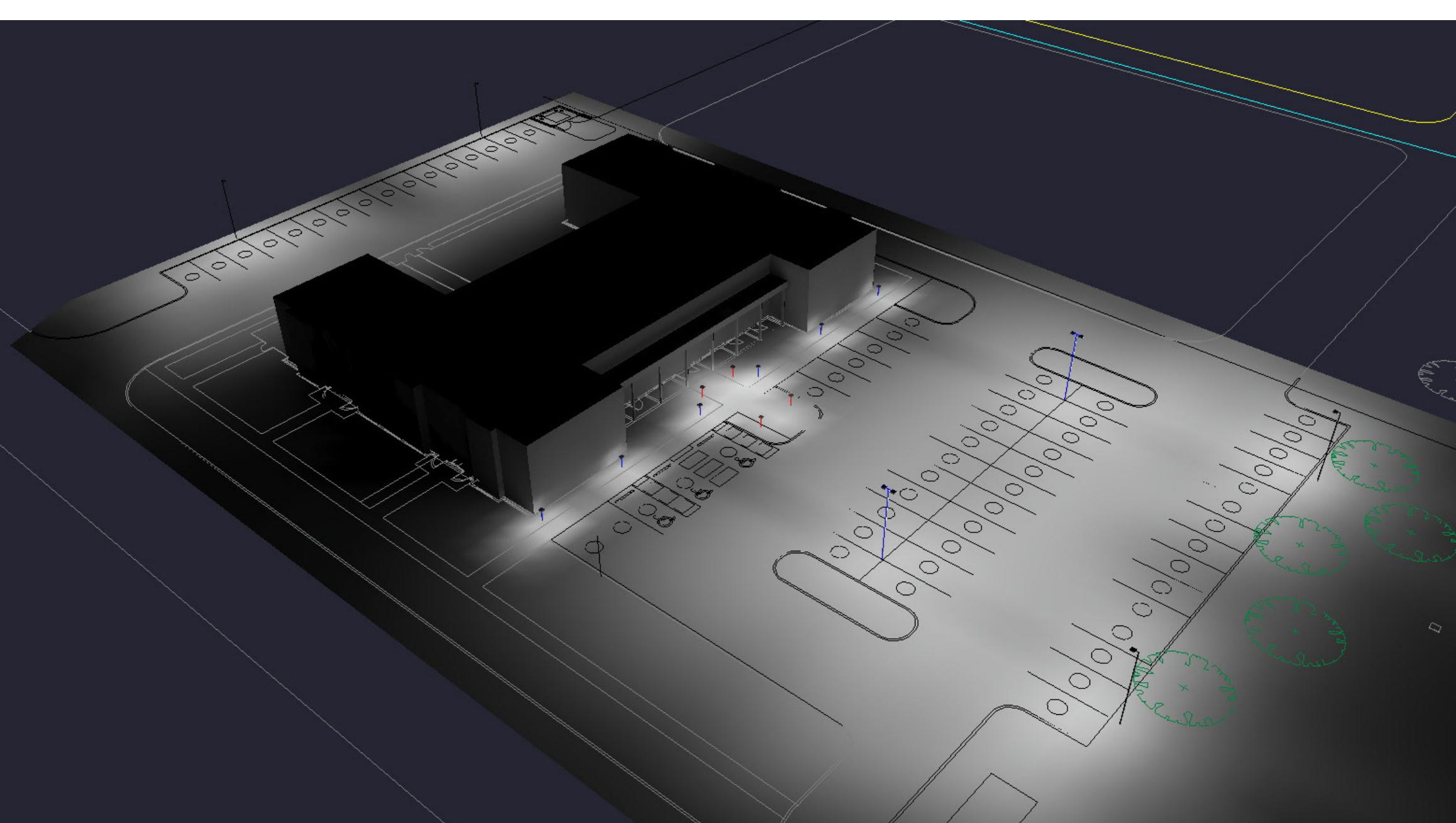
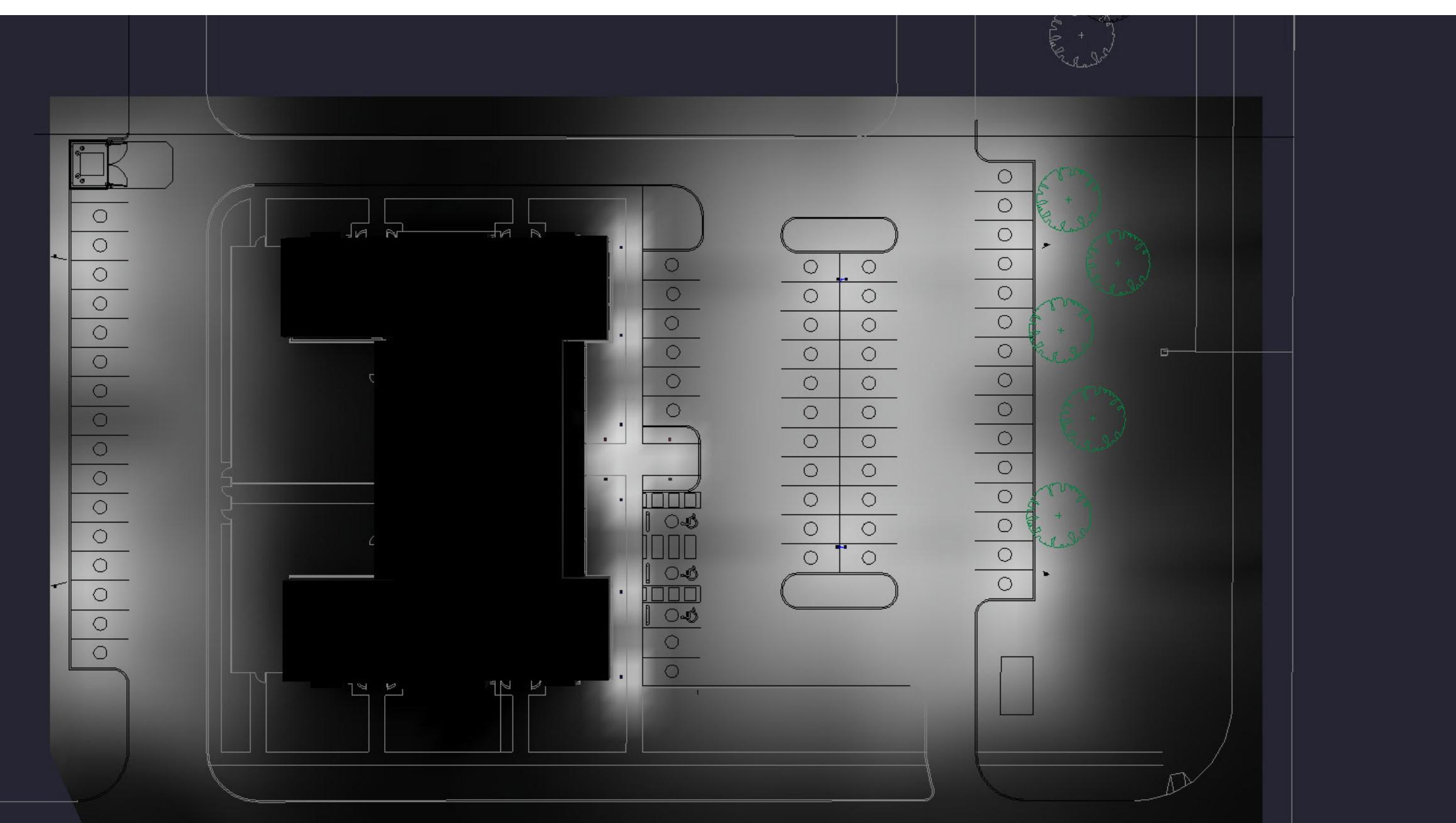
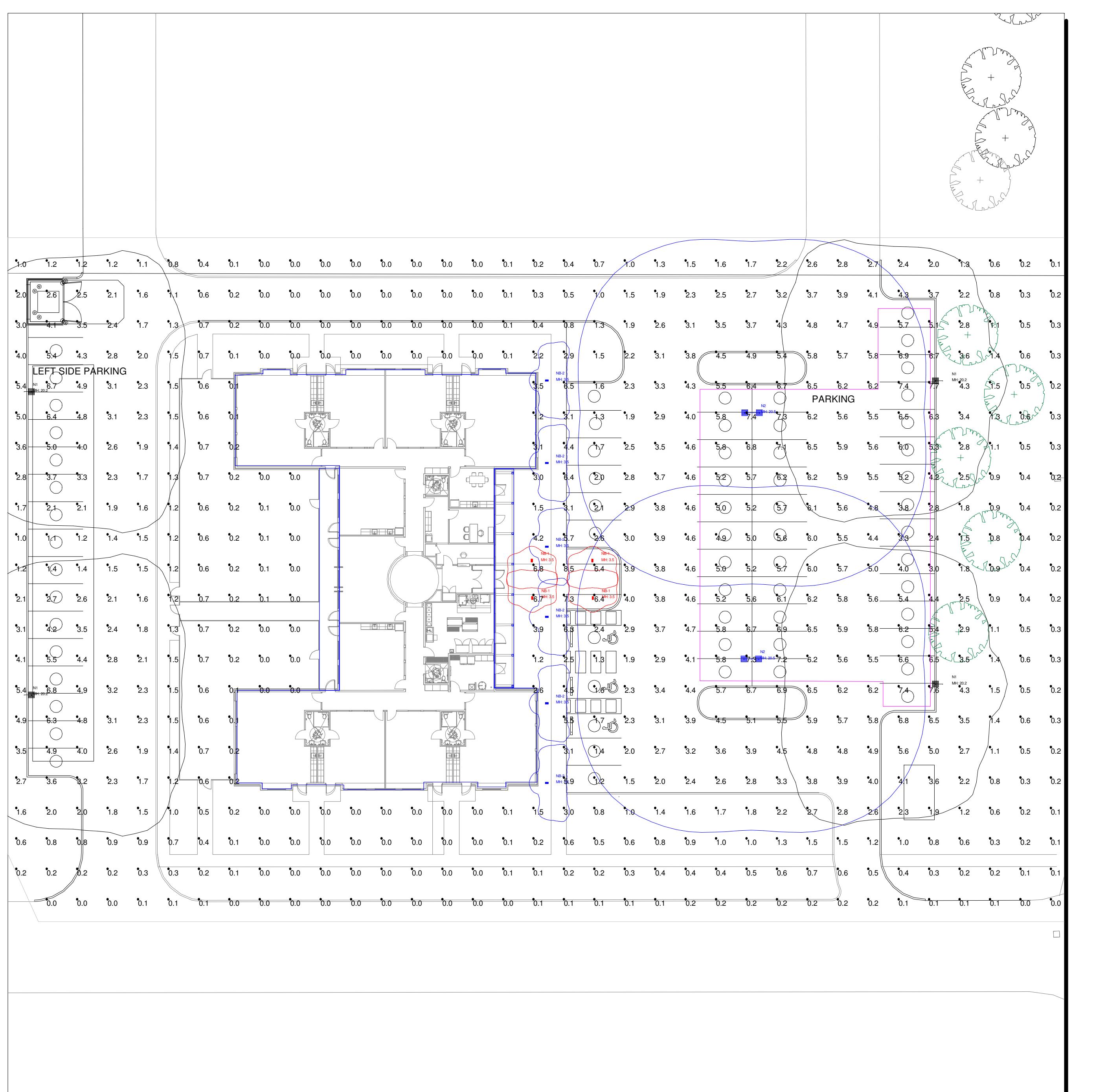
Buckeye Ranch * Grove City * Ohio



Drawing:

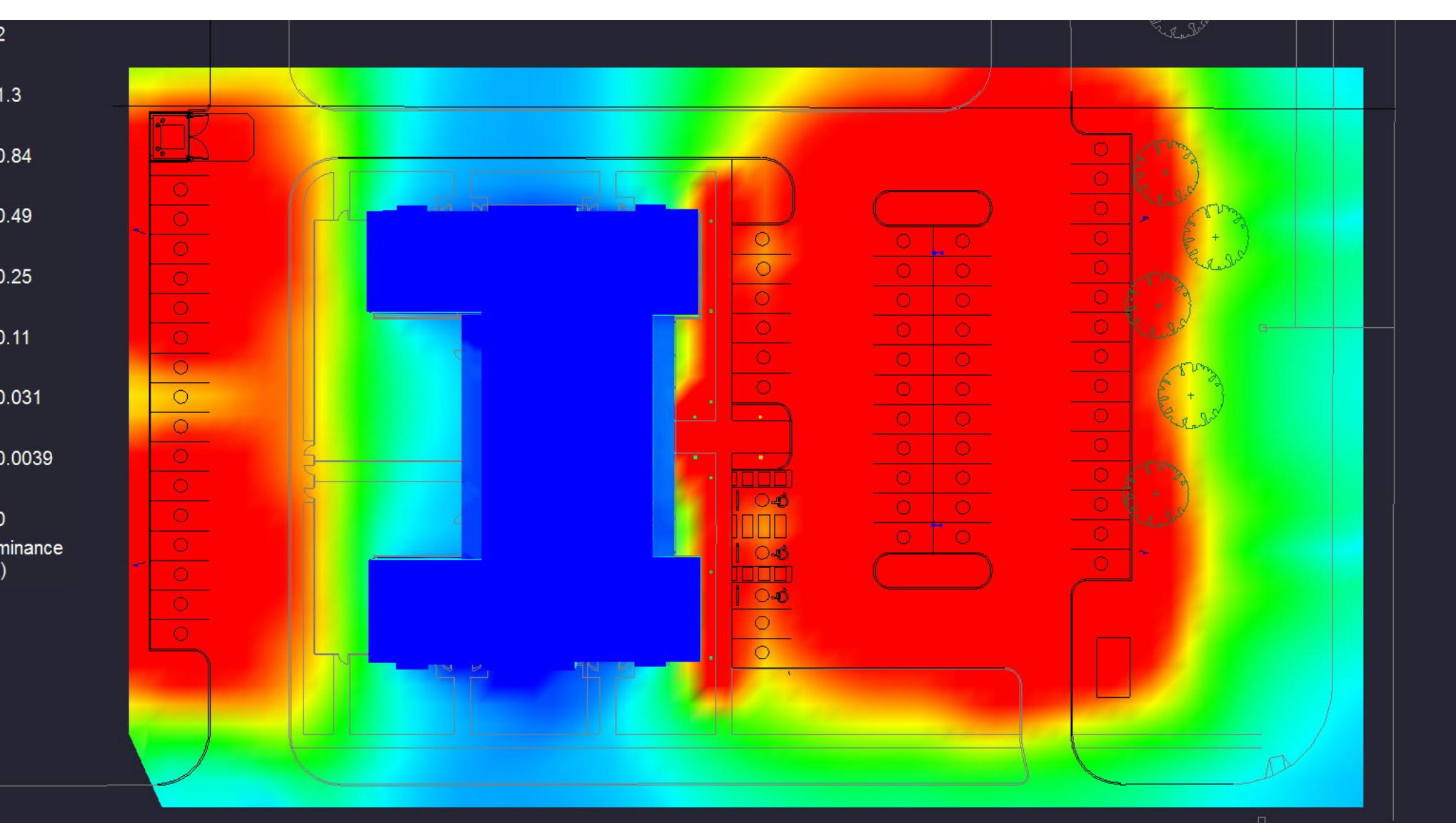
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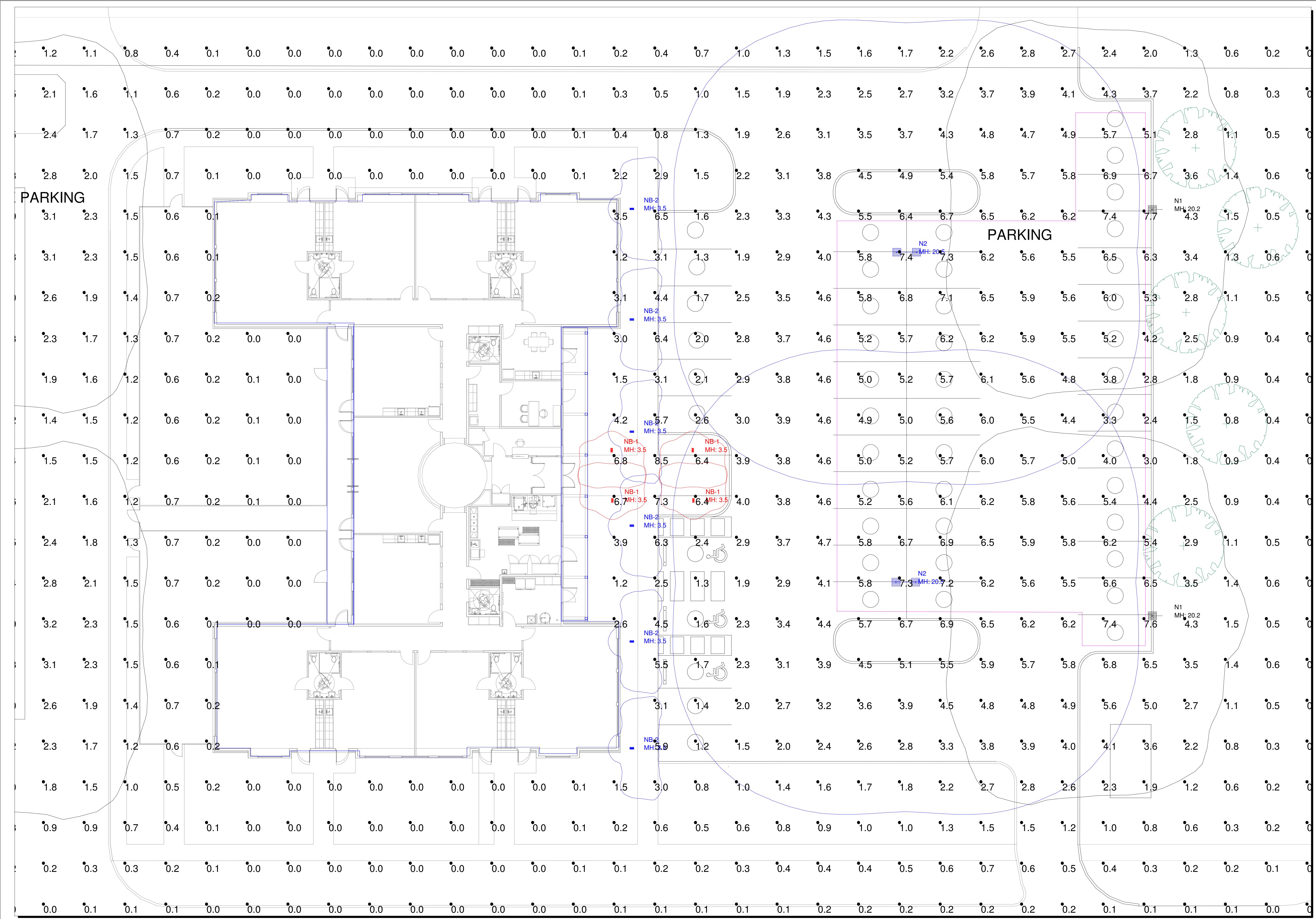
Photometric Study



Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
SITE CALCS	2.13	8.5	0.0	N.A.	N.A.
LEFT SIDE PARKING	3.95	6.8	1.1	3.59	6.18
PARKING	5.73	7.7	2.4	2.39	3.21

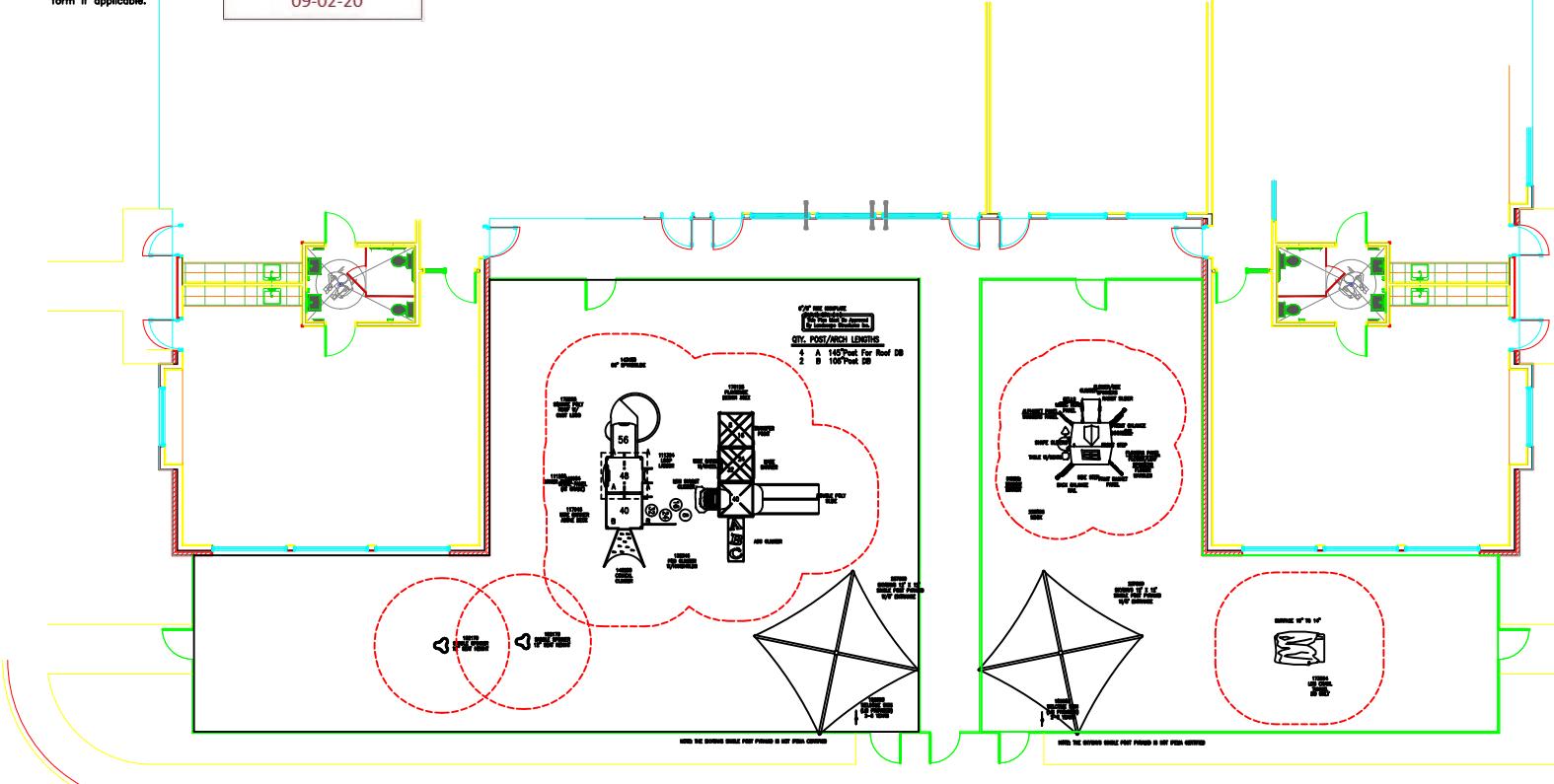
Luminaire Schedule					
Symbol	Qty	Label	LLF	Description	Lum. Watts
	4	NB-1	0.950	TBL-1-T4-16L-175-50K-BOLLARD @ 3.5' MTG. HT.	10
	6	NB-2	0.950	TBL-1-T3-16L-175-50K-BOLLARD @ 3.5' MTG. HT.	10
	4	N1	0.950	NV-1-T4-48L-1-50K-ASA-SINGLE @ 18' POLE ON 30in BASE	156
	2	N2	0.950	NV-1-T5-48L-1-50K-ASA-TWIN @ 18' POLE ON 30in BASE	156





Estimated manufacturing time:
6 weeks from the time of
order acceptance, or receipt
of SkyWays release of fabrication
form if applicable.

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09-02-20



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The play components outlined on this plan are IP/PEMA certified. (Unless model number is preceded with *) The use and layout of these components must conform to the requirements of ASTM F1487. To verify product certification, visit www.ipema.org

THIS PLAY AREA & PLAY EQUIPMENT IS DESIGNED FOR AGES 6-12 MONTHS UNLESS OTHERWISE NOTED ON PLAN.

IT IS THE MANUFACTURER'S OPINION THAT THIS PLAY AREA DOES CONFORM TO THE FOLLOWING SAFETY STANDARDS, CONSIDERATION OF APPROPRIATE PROTECTIVE SURFACING AND PERSPECTIVES INDICATED, OR WITHIN THE ENTIRE USE ZONE.

THIS CONCEPTUAL PLAN WAS BASED ON INFORMATION AVAILABLE TO US PRIOR TO CONSTRUCTION. DETAILED SITE INFORMATION INCLUDING SITE DIMENSIONS, TOPOGRAPHY, EXISTING UTILITIES, SOIL CONDITIONS, AND ENGINEERING SOLUTIONS SHOULD BE OBTAINED, EVALUATED, & UTILIZED IN THE DESIGN. PLACEMENT, VERTICAL DIMENSIONS, SIZE AND SIZE DIFFERENCES, AND LOCATION OF ALL EXISTING UTILITIES, EQUIPMENT, AND FEATURES ARE THE RESPONSIBILITY OF THE OWNER. SHADING SHOULD NOT FACE THE HOT AFTERNOON SUN.

CHOOSE A PROTECTIVE SURFACE MATERIAL THAT HAS A CRITICAL HEIGHT VALUE TO MEET THE REQUIREMENTS OF THE EQUIPMENT AND THE REF. ASTM F1487 STANDARD. REFER TO SAFETY SPECIFICATION FOR PLAYGROUND EQUIPMENT FOR ADDITIONAL INFORMATION. REASON: THE SURFACE MUST BE WELL DRAINED. IF THE SOIL DOES NOT DRAIN NATURALLY IT MAY BE TILED OR DUG 1/8" TO 1/4" PER FOOT TO A STORM DRAIN OR A "TRENCH DRAIN".

DESIGNED BY:
VC

COPYRIGHT:
LANDSCAPE STRUCTURES, INC.
601 7th STREET SOUTH - P.O. BOX 198
CLINTONVILLE, OHIO 45122 USA FAX 1-740-872-6091

Date Previous Drawing # Initials

SCALE IN FEET:
0' 5' 10' 20' 40'

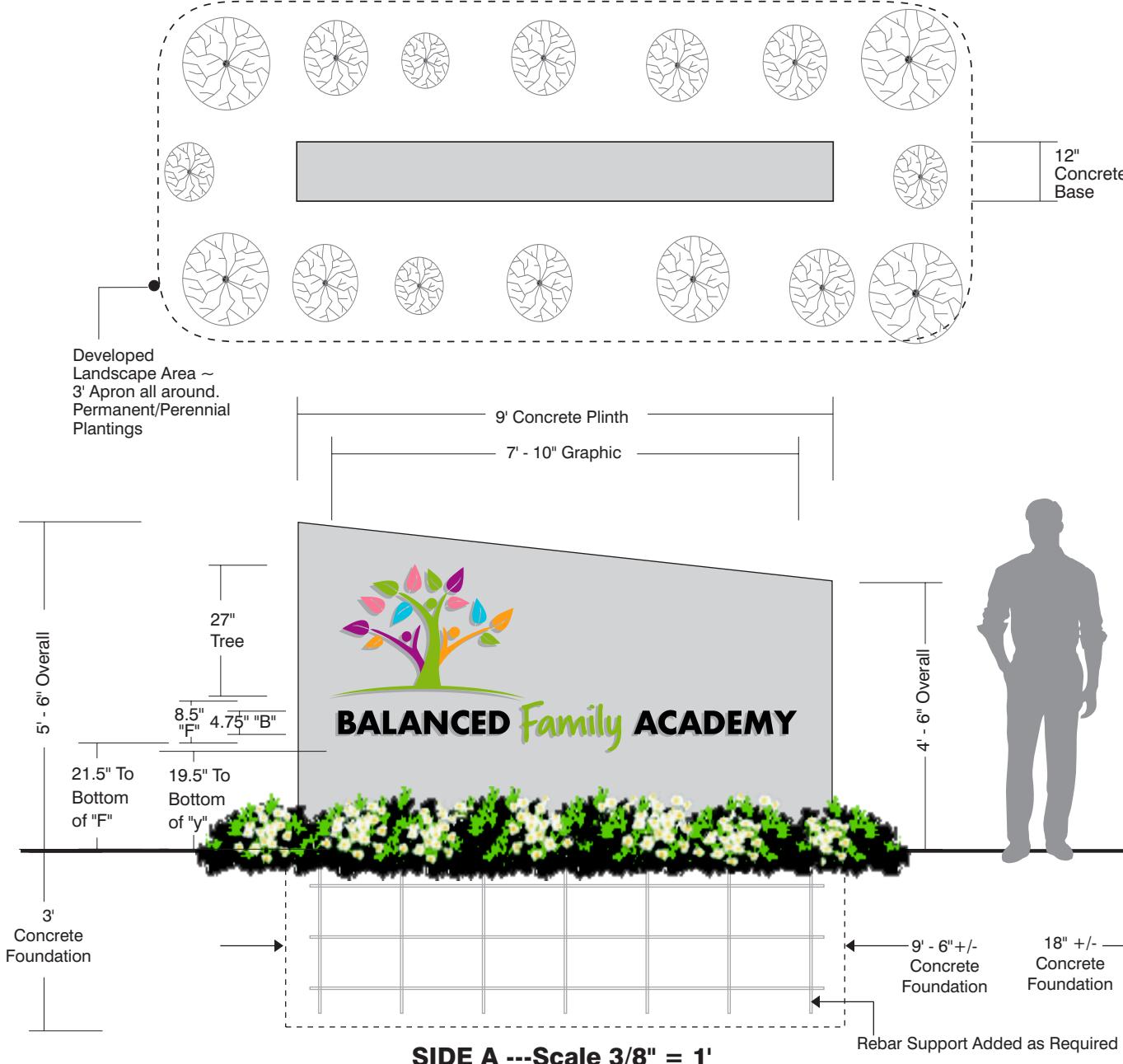
Clintonville
Clintonville, OH

Penchura LLC
Jason Hickman

SYSTEM TYPE:
PlayShaper
DRAWING #:
1138175-03



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09-09-20



1 Total----- D.F. MONUMENT SIGN

External Ground Lighting

CONCRETE PLINTH & SUBGRADE FOUNDATION BY OTHERS.
ANY ADDITIONAL CONCRETE REBAR STRUCTURE & SUPPORTS BY OTHERS.

GRAPHICS ARE ILLUMINATED BY GROUND MOUNTED FLOOD LIGHTS CONCEALED IN LANDSCAPE PLANTINGS.
LIGHTING & LANDSCAPE BY OTHERS.

GRAPHICS - INDIVIDUALLY CUT OUT SHAPES & LETTERS FROM 1/4" THICK FLAT ALUMINUM.
ALL EDGES SMOOTHED & FINISHED.

CONCEALED , CORROSIVE RESISTANT BACK STUDS WELDED IN PLACE & SLEEVED WITH 1/2" SPACERS, TO ELEVATE GRAPHICS FROM CONCRETE SURFACE.
BACK STUDS ARE SET IN PRE-DRILLED ADHESIVE FILLED BORES.

COLORS-----

TREE - LIGHT GREEN PMS#376, LT. BLUE PMS#311,
LT. ORANGE PMS#1375, PINK PMS#190, PURPLE PMS#248
"BALANCED" & "ACADEMY" - BLACK
"FAMILY" - LT. GREEN PMS#376

SPACERS - MATCH CONCRETE COLOR






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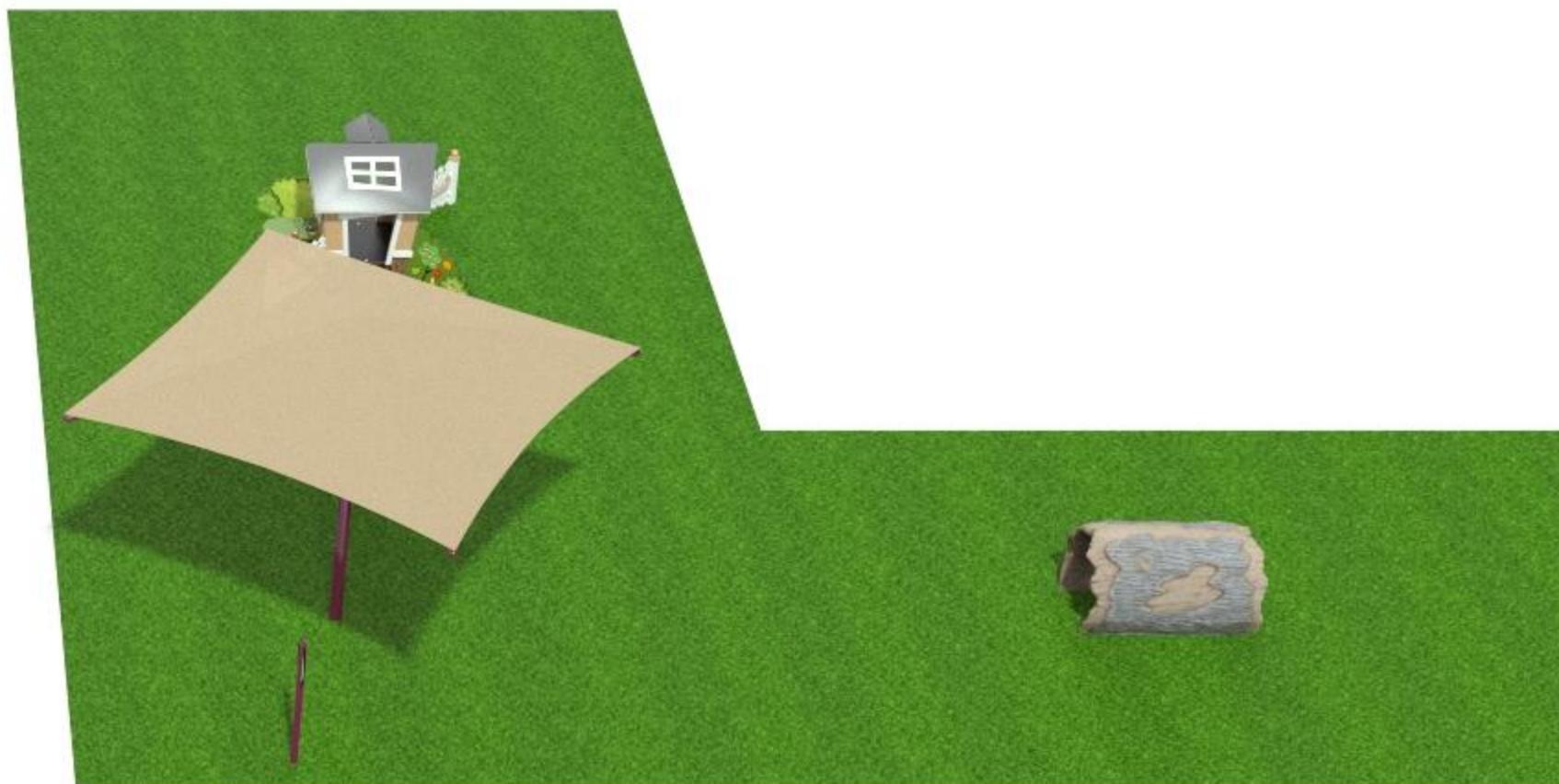

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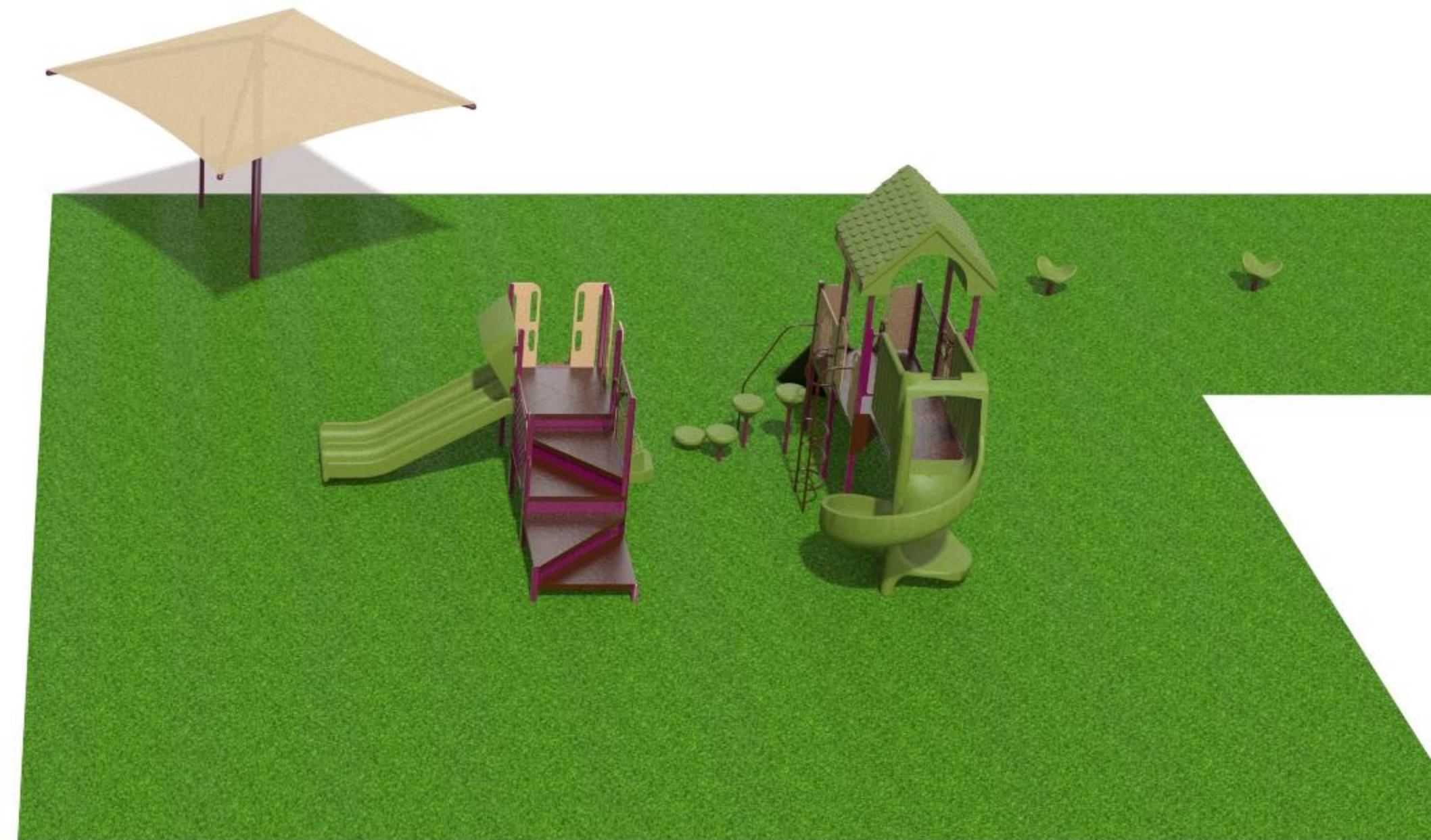

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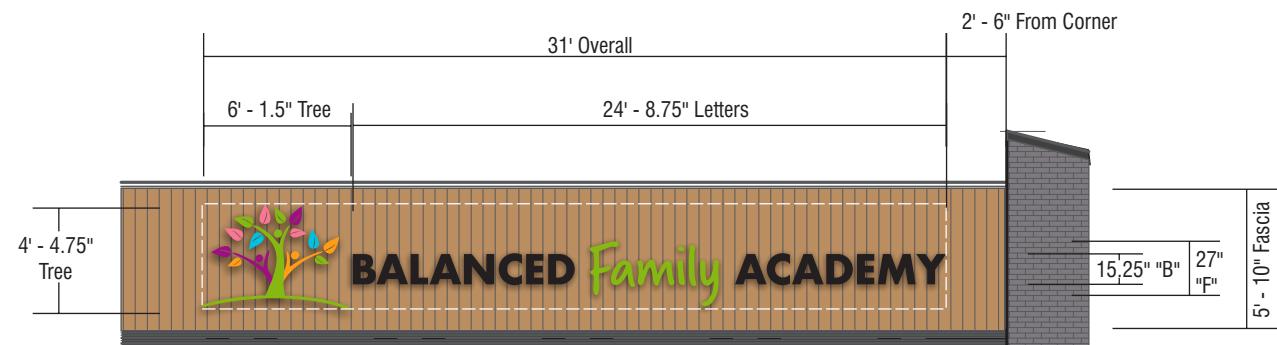
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**E1 1 Set Total— FACE ILLUMINATED WALL GRAPHICS
136.27 Sq.Ft.**



COLORS---

TREE - LIGHT GREEN PMS#376 LT. BLUE PMS#311, LT. ORANGE PMS#1375, PINK PMS190, PURPLE PMS#248 (Closest Translucent Vinyl Color Match)
OPAQUE VINYL LEAF DETAIL - TO MATCH WOOD FASCIA.

"BALANCED" & "ACADEMY" - PERFORATED BLACK/WHITE VINYL OVERLAYS.
LETTERS APPEAR BLACK AT DAY; WHITE AT NIGHT.
"FAMILY" - LT GREEN PMS#376.

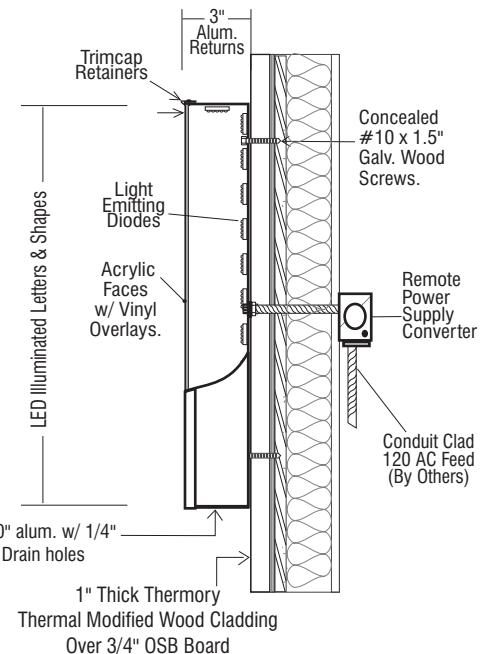
ALL TRIMCAP - BLACK . ALL RETURNS - BLACK

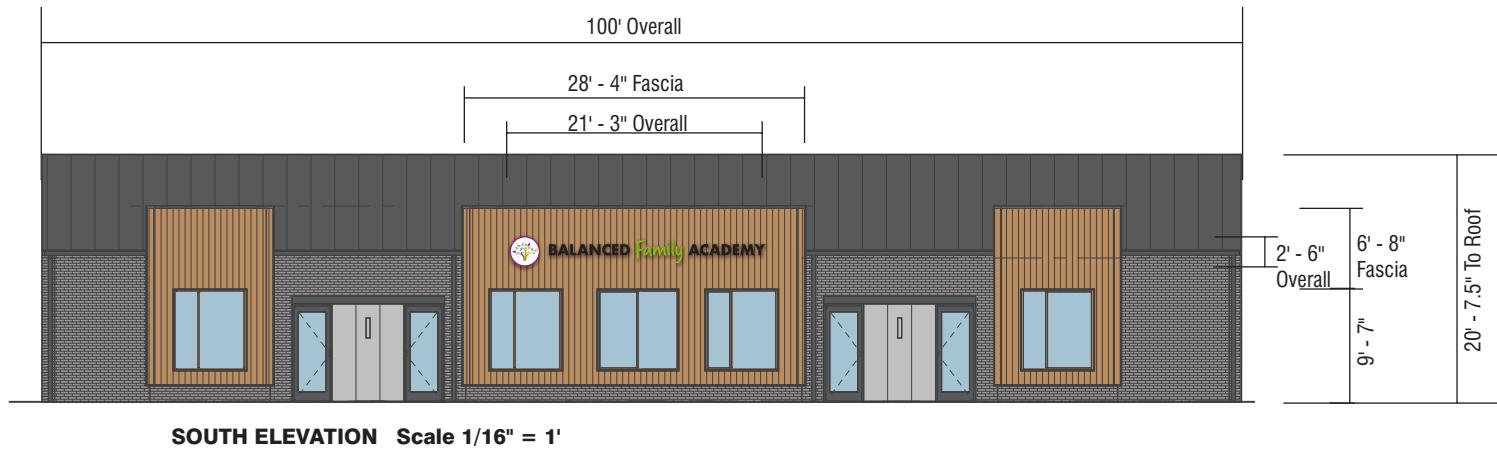
INDIVIDUAL ALUMINUM FORMED LETTERS & SHAPES, 3"+DEEP.

TRANSLUCENT ACRYLIC FACES HELD IN WITH TRIMCAP RETAINERS.
"TREE" & "FAMILY" HAS TRANSLUCENT VINYL OVER ACRYLIC. "LEAVES" HAVE OPAQUE VINYL DETAIL ON EACH.
"BALANCED" & "ACADEMY" HAVE PERFORATED BLACK/WHITE TRANSITIONAL VINYL.

ALL ILLUMINATED WITH LED LIGHT CLUSTERS INSIDE& POWERED BY REMOTE POWER CONVERSION UNIT MOUNTED TO INTERIOR WALL.
PRIMARY ELECTRIC POWER BROUGHT TO SITE BY OTHERS.

FABRICATED GRAPHICS MOUNTED FLUSH TO THERMAL MODIFIED WOOD SIDING WITH CONCEALED, #10 GALVANIZED WOOD SCREW AT 1.5" LONG.
4 MINIMUM PER LETTER; EVENLY SPACED.





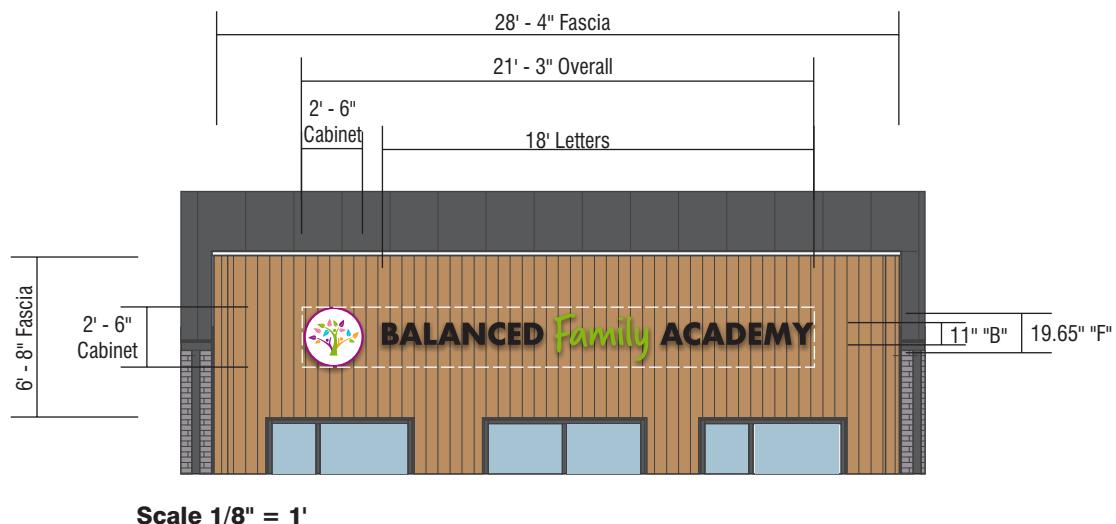
COLORS---

CABINET FACE - WHITE ACRYLIC BACKGROUND WITH PURPLE PMS#248 EDGE BORDER.
MULTI COLORED TREE - LIGHT GREEN PMS#376 LT. BLUE PMS#311, LT. ORANGE PMS#1375,
PINK PMS190, PURPLE PMS#248 (Closest Translucent Vinyl Color Match)

"BALANCED" & "ACADEMY" FACES- PERFORATED BLACK/WHITE VINYL OVERLAYS.
LETTERS APPEAR BLACK AT DAY; WHITE AT NIGHT.
"FAMILY" FACES - LT GREEN PMS#376.

ALL TRIMCAP & RETURNS - BLACK

S1 1 Set Total— FACE ILLUMINATED WALL GRAPHICS 53.125 Sq.Ft.

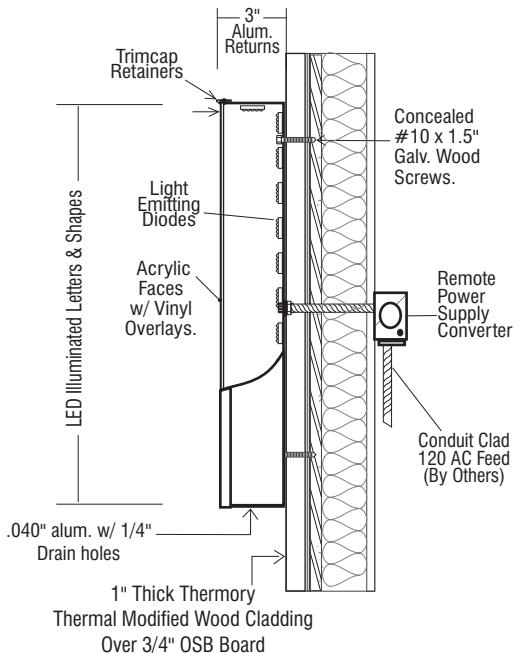


INDIVIDUAL ALUMINUM FORMED LETTERS & CABINET, 3"+DEEP.

TRANSLUCENT ACRYLIC FACES HELD IN WITH TRIMCAP RETAINERS.
"CABINET" & "FAMILY" HAS TRANSLUCENT VINYL OVER ACRYLIC.
"BALANCED" & "ACADEMY" HAVE PERFORATED BLACK/WHITE TRANSITIONAL VINYL.

ALL ILLUMINATED WITH LED LIGHT CLUSTERS INSIDE& POWERED BY REMOTE POWER CONVERSION UNIT MOUNTED TO INTERIOR WALL.
PRIMARY ELECTRIC POWER BROUGHT TO SITE BY OTHERS.

FABRICATED GRAPHICS MOUNTED FLUSH TO THERMAL MODIFIED WOOD SIDING WITH CONCEALED, #10 GALVANIZED WOOD SCREW AT 1.5" LONG.
3 MINIMUM PER LETTER; EVENLY SPACED.
5 MINIMUM PER CABINET; EVENLY SPACED



**MONUMENT
SIGN DESIGN IS
FORTHCOMING**



NV-1-ASA

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09-02-20

AREA LIGHTING

FORM AND FUNCTION

- Sleek, low profile housing
- Spec grade performance
- Engineered for optimum thermal management
- Low depreciation rate
- Reduces energy consumption and costs up to 65%
- Exceeds IES foot candle levels utilizing the least number of poles and fixtures per project
- Optical system designed for:
 - Parking Lots
 - Auto Dealerships
 - General Area Lighting

CONSTRUCTION

- Die Cast Aluminum
- External cooling fins, Finite Element Analysis (FEA) designed
- Corrosion resistant external hardware
- One-piece silicone gasket ensures IP-65 seal for electronics compartment
- One-piece Optics Plate™ mounting silicone Micro Optics
- Two-piece silicone Micro Optic system ensures IP-67 level seal around each PCB
- Grade 2 Clear Anodized Optics Plate™ standard

FINISH

- 3-5 mils electrostatic powder coat.
- NLS' standard high-quality finishes prevent corrosion protects against and extreme environmental conditions

WARRANTY

Five-year limited warranty for drivers and LEDs.



LISTINGS

- Certified to UL 1598
- UL 8750
- CSA C22.2 No. 250.0
- DesignLights Consortium® (DLC)
- DesignLights Consortium Premium® (DLC)
- IP65/ IP67 Rated
- 3G Vibration Rated per ANSI C136.31-2010



LED WATTAGE CHART

	16L	32L	48L	64L
350 millamps	18w	-	-	-
530 millamps	28w	-	-	-
700 millamps	36w	71w	104w	136w
1050 millamps	56w	106w	156w	205w

Project Name:

Type:

Light Dist.	No. of LEDs	Millamps	Kelvin	Volts	Mounting	Color	Options
NV Size 1 (NV-1)	Type 2 (T2)	16 (16L) 32 (32L)	350 (35) (30K)	3000K (UNV) 120-277 (HV)	Architectural Sweep Arm (ASA)	Bronze (BRZ)	Bird Deterrant (BD) Marine Grade Finish (MGF) Optic Plate Painted to Match Fixture (OPP)
	Type 3 (T3)	48 (48L) 64 (64L)	530 (53) (40K)	4000K (HV)		White (WHT)	Nema 7-Pin Receptacle (PE7) Photocell + Receptacle (PCR) Receptacle + Shorting Cap (PER)
	Type 4 (T4)		700 (7) (50K)	5000K (50K)		Silver (SVR)	FSP-211 with Motion Sensor (UNV Voltage) (FSP-20) *9'-20' Heights (FSP-40) *21'-40' Heights Surge Protector (10K)
	Type 5 (T5)		1050 (1)			Black (BLK)	Round Pole Adaptor 3"- 4" Pole (RPA4) Round Pole Adaptor 5"- 6" Pole (RPA5)
	Nema 2 24° Narrow Beam (N2)					Graphite (GPH)	Rotated Optic Left (ROL) Rotated Optic Right (ROR) Automotive House Side Shield (AHS)
	Nema 3 30° Narrow Beam (N3)					Grey (GRY)	House Side Shield (HSS)
						Custom (CS)	*HSS not applicable with N2 - NEMA 24° Optics *HSS not applicable with N3 - NEMA 30° Optics

ELECTRICAL

- 120-277 Volts (UNV) or 347-480 Volts (HV)
- 0-10V dimming driver by Philips Advance
- Driver power factor at maximum load is $\geq .95$, THD maximum load is 15%
- All internal wiring UL certified for 600 VAC and 105°C
- All drivers, controls, and sensors housed in enclosed IP-65 compartment
- Lumileds Luxeon MX LED's
- CRI >70
- Color temperatures: 3000K, 4000K, 5000K

OPTIONS

- **BIRD DETERRENT (BD)**—offers effective and humane deterrent for larger bird species and provides cost-effective long-term solution to nuisance bird infestations and protect your property.
- **MARINE GRADE FINISH (MGF)**—A multi-step process creating protective finishing coat against harsh environments.
 - Chemically washed in a 5 stage cleaning system.
 - Pre-baked
 - Powder coated 3-5 mils of Zinc Rich Super Durable Polyester Primer.
 - 1-2 feet inside pole coverage top and bottom.
 - Oven Baked.
 - Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mil thickness.
- **SHIELDS (HSS, AHS)**—House Side Shield (HSS) is designed for full property line cut-off. Automotive House Side Shield (AHS) is a single-sided shield allowing partial cut-off on either side or front of luminaire.
- **ROUND POLE ADAPTER (RPA)**— When using round poles, specify Round Pole Adapter (RPA). Specify RPA4 when installing on 3"-4" round poles, and RPA5 when installing on 5"-6" round poles.

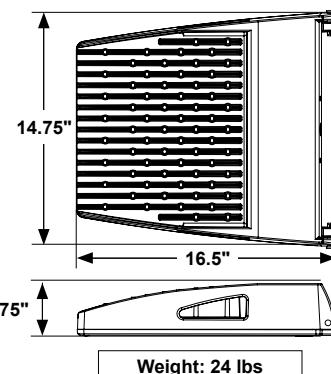
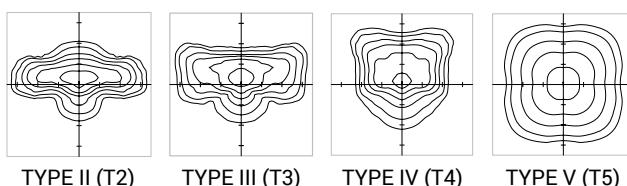
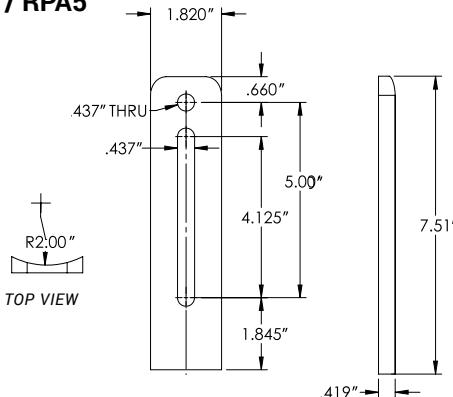
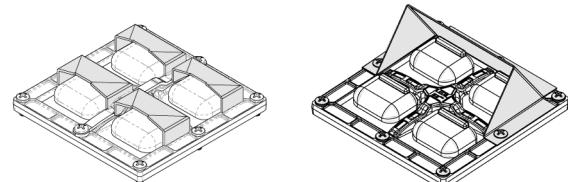
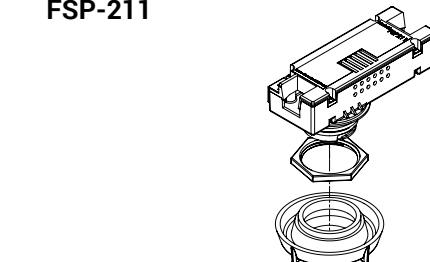
CONTROLS

- **FSP-211 (FSP-X)**—Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.
 - All control parameters adjustable via wireless configuration remote storing and transmitting sensor profiles.
 - FSP-20 mounting heights 9-20 feet
 - FSP-40 mounting heights 21-40 feet.
 - Includes 5 dimming event cycles, 0-10V dimming with motion sensing, reprogrammable in the field.
- **NEMA 7-PIN RECEPTACLE (PE7)**—An ANSI C136.41-2013 receptacle provides electrical and mechanical interconnection between photo control cell and luminaire. Dimming receptacle available two or four dimming contacts supports 0-10 VDC dimming methods or Digital Addressable Lighting Interface (DALI), providing reliable power interconnect.

OPTICS

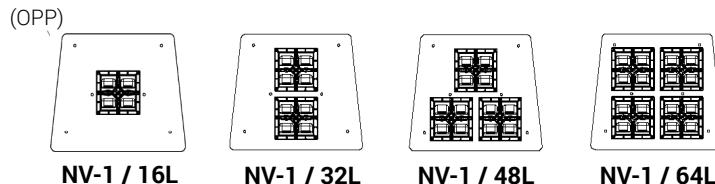
Silicone optics high photothermal stability and light output provides higher powered LEDs with minimized lumen depreciation LED life. UV and thermal stability with scratch resistance increases exterior application durability.

- IES Types

**RPA4 / RPA5****AUTOMOTIVE HOUSE SIDE SHIELD****FSP-211**

OPTICAL CONFIGURATIONS

Rotatable Optics (ROR) Rotated Right, (ROL) Rotated Left options available. Optics field and factory rotatable.



* OPTIC PLATE PAINTED TO MATCH FIXTURE FINISH (OPP) – Optic Plate standard clear anodized, Grade 2. When (OPP) specified, Optic Plate finish will match fixture finish.

LUMENS

PART NUMBER	N2	LM/W	BUG	N3	LM/W	T2	LM/W	DLC	BUG	T3 HSS	LM/W	BUG	T3	LM/W	DLC	BUG	T4 AHS	LM/W	T4 HSS	LM/W	BUG	T4	LM/W	DLC	BUG	T5	LM/W	DLC	BUG	W
NV-1-16L-35-30K	1944	108	B2-U0-G0	2016	112	2209	117	P	B1-U0-G1	1134	63	B0-U0-G0	2106	117	P	B1-U0-G1	1296	72	1116	62	B0-U0-G0	2187	116	P	B1-U0-G1	2124	118	P	B2-U0-G0	18
NV-1-16L-35-40K	2016	112	B2-U0-G0	2088	116	2268	126	P	B1-U0-G1	1206	67	B0-U0-G0	2286	127	P	B1-U0-G1	1368	76	1188	66	B0-U0-G0	2250	125	P	B1-U0-G1	2304	128	P	B2-U0-G0	18
NV-1-16L-35-50K	2088	116	B2-U0-G0	2160	120	2376	132	P	B1-U0-G1	1278	71	B0-U0-G0	2394	133	P	B1-U0-G1	1440	80	1260	70	B0-U0-G0	2358	131	P	B1-U0-G1	2412	134	P	B2-U0-G2	18
NV-1-16L-53-30K	3024	108	B3-U0-G1	3136	112	3192	114	P	B1-U0-G1	1764	63	B0-U0-G1	3220	115	P	B1-U0-G1	2016	72	1736	62	B0-U0-G1	3119	113	P	B1-U0-G1	3248	116	P	B2-U0-G1	28
NV-1-16L-53-40K	3136	112	B3-U0-G1	3248	116	3472	124	P	B1-U0-G1	1876	67	B0-U0-G1	3472	124	P	B1-U0-G1	2128	76	1848	66	B0-U0-G1	3444	123	P	B1-U0-G1	3500	125	P	B2-U0-G1	28
NV-1-16L-53-50K	3248	116	B2-U0-G1	3360	120	3612	129	P	B1-U0-G1	1988	71	B0-U0-G1	3640	130	P	B1-U0-G1	2240	80	1960	70	B0-U0-G1	3584	128	P	B1-U0-G1	3668	131	P	B2-U0-G1	28
NV-1-16L-7-30K	3888	108	B3-U0-G1	4032	112	3960	110	P	B1-U0-G1	2268	63	B0-U0-G1	3960	110	P	B1-U0-G1	2592	72	2232	62	B0-U0-G1	3973	109	P	B1-U0-G1	3996	111	P	B3-U0-G1	36
NV-1-16L-7-40K	4032	112	B3-U0-G1	4176	116	4428	123	P	B1-U0-G1	2412	67	B0-U0-G1	4284	119	P	B1-U0-G1	2736	76	2376	66	B0-U0-G1	4212	117	P	B1-U0-G1	4320	120	P	B3-U0-G1	36
NV-1-16L-7-50K	4176	116	B3-U0-G1	4320	120	4644	129	P	B1-U0-G1	2556	71	B0-U0-G1	4500	125	P	B1-U0-G1	2880	80	2520	70	B0-U0-G1	4428	123	P	B1-U0-G1	4500	125	P	B3-U0-G1	36
NV-1-16L-1-30K	6048	108	B3-U0-G1	6272	112	6160	110	S	B1-U0-G1	3528	63	B0-U0-G1	6384	114	P	B1-U0-G1	4032	72	3472	62	B0-U0-G1	6232	112	P	B1-U0-G1	6440	115	P	B3-U0-G1	56
NV-1-16L-1-40K	6272	112	B3-U0-G1	6496	116	6832	122	P	B1-U0-G1	3752	67	B0-U0-G1	6888	123	P	B2-U0-G2	4256	76	3696	66	B0-U0-G1	6776	121	P	B2-U0-G2	6944	124	P	B3-U0-G2	56
NV-1-16L-1-50K	6496	116	B4-U0-G1	6720	120	7168	128	P	B1-U0-G2	3976	71	B0-U0-G1	7224	129	P	B2-U0-G2	4480	80	3920	70	B0-U0-G1	7112	127	P	B2-U0-G2	7280	130	P	B3-U0-G2	56
NV-1-32L-7-30K	7668	108	B4-U0-G1	7952	112	7810	110	S	B1-U0-G2	4473	63	B0-U0-G1	7810	110	S	B2-U0-G2	5112	72	4402	62	B0-U0-G1	7739	109	S	B2-U0-G2	7881	111	S	B3-U0-G2	71
NV-1-32L-7-40K	7952	112	B4-U0-G1	8236	116	9017	127	P	B1-U0-G2	4757	67	B0-U0-G1	8449	119	P	B2-U0-G2	5396	76	4686	66	B0-U0-G2	8307	117	P	B2-U0-G2	8520	120	P	B3-U0-G2	71
NV-1-32L-7-50K	8236	116	B4-U0-G1	8520	120	9159	129	P	B2-U0-G2	5041	71	B0-U0-G2	8875	125	P	B2-U0-G2	5680	80	4970	70	B0-U0-G2	8733	123	P	B2-U0-G2	8946	126	P	B3-U0-G2	71
NV-1-32L-1-30K	11448	108	B4-U0-G1	11872	112	11660	110	S	B2-U0-G2	6678	63	B0-U0-G2	12084	114	S	B2-U0-G2	7632	72	6572	62	B0-U0-G2	11820	112	S	B2-U0-G2	12190	115	S	B4-U0-G2	106
NV-1-32L-1-40K	11872	112	B4-U0-G1	12296	116	12932	122	P	B2-U0-G2	7102	67	B0-U0-G2	13038	123	P	B2-U0-G2	8056	76	6996	66	B0-U0-G2	12826	121	P	B3-U0-G2	13144	124	P	B4-U0-G2	106
NV-1-32L-1-50K	12296	116	B4-U0-G1	12720	120	13568	128	P	B2-U0-G2	7526	71	B0-U0-G2	13674	129	P	B3-U0-G3	8480	80	7420	70	B0-U0-G2	13462	127	P	B3-U0-G3	13780	130	P	B4-U0-G2	106
NV-1-48L-7-30K	11232	108	B4-U0-G1	11648	112	11440	110	S	B2-U0-G2	6552	63	B0-U0-G2	11440	110	S	B2-U0-G2	7488	72	6448	62	B0-U0-G2	11336	109	S	B2-U0-G2	11544	111	S	B4-U0-G2	104
NV-1-48L-7-40K	11648	112	B4-U0-G1	12064	116	13208	127	P	B2-U0-G2	6968	67	B0-U0-G2	12376	119	P	B2-U0-G2	7904	76	6864	66	B0-U0-G2	12168	117	P	B2-U0-G2	12480	120	P	B4-U0-G2	104
NV-1-48L-7-50K	12064	116	B4-U0-G1	12480	120	13520	130	P	B2-U0-G2	7384	71	B0-U0-G2	13000	125	P	B3-U0-G3	8320	80	7280	70	B0-U0-G2	12792	123	P	B2-U0-G2	13104	126	P	B4-U0-G2	104
NV-1-48L-1-30K	16848	108	B5-U0-G1	17472	112	17160	110	S	B3-U0-G3	9828	63	B1-U0-G2	17784	114	S	B3-U0-G3	11232	72	9672	62	B1-U0-G2	17472	112	S	B3-U0-G3	17940	115	S	B4-U0-G2	156
NV-1-48L-1-40K	17472	112	B5-U0-G1	18096	116	19032	122	P	B3-U0-G3	10452	67	B1-U0-G2	19188	123	P	B3-U0-G3	11856	76	10296	66	B1-U0-G2	18876	121	P	B3-U0-G3	19344	124	P	B5-U0-G3	156
NV-1-48L-1-50K	18096	116	B5-U0-G1	18720	120	19968	128	P	B3-U0-G3	11076	71	B1-U0-G2	20124	129	P	B3-U0-G3	12480	80	10920	70	B1-U0-G2	19812	127	P	B3-U0-G3	20280	130	P	B5-U0-G3	156
NV-1-64L-7-30K	14688	108	B5-U0-G1	15232	112	14960	110	S	B2-U0-G2	8568	63	B0-U0-G2	14960	110	S	B3-U0-G3	9792	72	8432	62	B1-U0-G2	14824	109	S	B3-U0-G3	15096	111	S	B4-U0-G2	136
NV-1-64L-7-40K	15232	112	B5-U0-G1	15776	116	17272	127	P	B3-U0-G3	9112	67	B0-U0-G2	16184	119	P	B3-U0-G3	10336	76	8976	66	B1-U0-G2	15912	117	P	B3-U0-G3	16320	120	P	B4-U0-G2	136
NV-1-64L-7-50K	15776	116	B5-U0-G1	16320	120	17680	130	P	B3-U0-G3	9656	71	B1-U0-G2	17000	125	P	B3-U0-G3	10880	80	9520	70	B1-U0-G2	16728	123	P	B3-U0-G3	17136	126	P	B4-U0-G2	136
NV-1-64L-1-30K	22140	108	B5-U0-G1	22960	112	22550	110	S	B3-U0-G3	12915	63	B1-U0-G2	23370	114	S	B3-U0-G3	14760	72	12710	62	B1-U0-G2	22960	112	S	B3-U0-G3	23575	115	S	B5-U0-G3	205
NV-1-64L-1-40K	22960	112	B5-U0-G1	23780	116	25010	122	P	B3-U0-G3	13735	67	B1-U0-G3	25215	123	P	B3-U0-G3	15580	76	13530	66	B1-U0-G3	24805	121	P	B3-U0-G4	25420	124	P	B5-U0-G3	205
NV-1-64L-1-50K	23780	116	B5-U0-G1	24600	120	26240	128	P	B3-U0-G3	14555	71	B1-U0-G3	26445	129	P	B3-U0-G3	16400	80	14350	70	B1-U0-G3	26035	127	P	B3-U0-G4	26650	130	P	B5-U0-G3	205

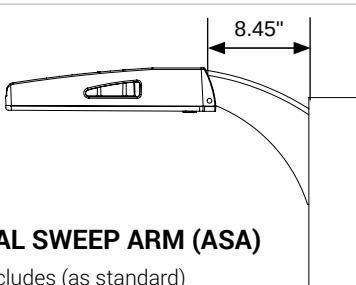
*DLC S= Standard P= Premium

EPA

EPA	SGL	D90	D180	T90	T120	QD
NV-1-ASA	0.75	1.29	1.50	1.99	2.05	1.99

L70/L90 DATA

TEMP.	NV-1	
	L70 (64L-1050mA)	L90 (64L-1050mA)
25°C	483,000	160,000

MOUNTING OPTIONS**ARCHITECTURAL SWEEP ARM (ASA)**

Cast Sweep Arm includes (as standard)
Internal Quick Mount Bracket.



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TBL

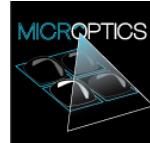
ARCHITECTURAL BOLLARDS

The Trac Bollard TBL is a combination of security and vandal resistance that blends beautifully into any pathway environment.

Designed as a slim bollard. A beautiful performance is created while combining uniform illumination for pathways or landscape at 24", 36" or 42" heights. With two designs to choose from; linear and slope.

TBL offers Kelvin temperatures of (warm) 3000, (neutral) 4000 and (cool) 5000 in Type 2, 3, 4 and 5 light distribution.

Conforms to the strictest Made in America standards—designed, tooled, fabricated and assembled in the USA.



MICRO OPTIC SYSTEM

Our new cell-enclosed, micro optic silicone modules produce high clarity and outstanding performance.

LED WATTAGE CHART

	16L
175 millamps	10w
350 millamps	17w
530 millamps	26w
700 millamps	35w
1050 millamps	56w

Project Name

Type:

Cat #	Length	Light Dist	No of LEDs	Millamps	Kelvin	Volts	Mounting	Color	Options
TBL (TBL)	24 in (24)	Type 2 (T2)	16 (16L)	175 (175)	3000K (30K)	120-277 (UNV)	Anchor Base (AB)	Bronze (BRZ)	Surge Protector (10K)
	36 in (36)	Type 3 (T3)		350 (35)	4000K (40K)			White (WHT)	Marine Grade Finish (MGF)
	42 in (42)	Type 4 (T4)		530 (53)	5000K (50K)			Silver (SVR)	Dual Head (DH)
		Type 5 (T5)		700 (7)				Hunter Green (HGN)	
				1050 (1)				Black (BLK)	
								Graphite (GPH)	
								Grey (GRY)	
								Custom (CS)	

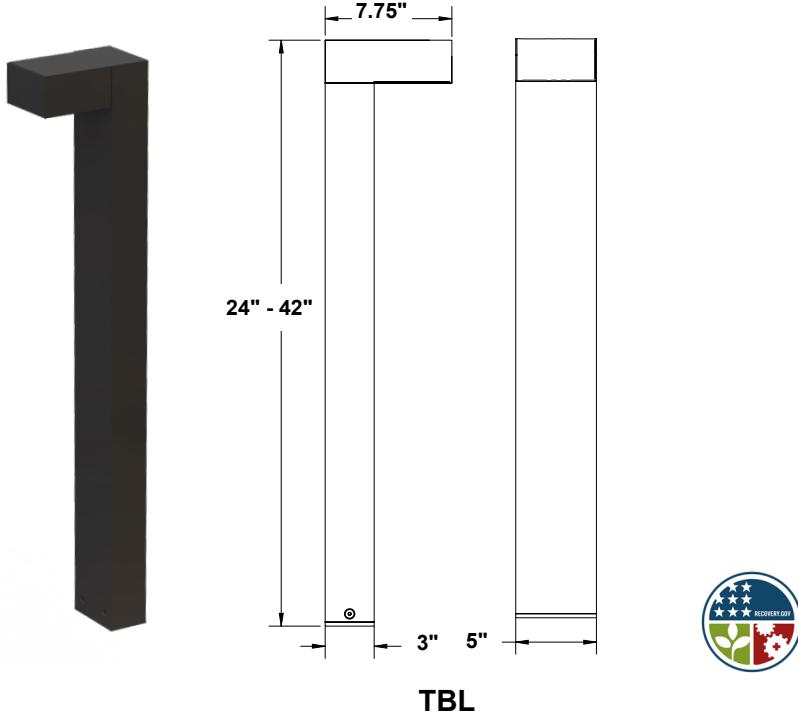
PRODUCT SPECIFICATIONS

Material: Extruded Aluminum
LED: Lumileds Luxeon MX. CRI 70
Optics: Micro Optic T2, T3, T4 and T5
Watts: 10-56
Listings: Conforms to UL 1598 Standards

Driver: 0-10V Dimming driver as standard by Philips Advance
 THD @ Max Load < 15%
 Power Factor @ Max Load < 0.95
Kelvin: 3000, 4000, or 5000
Finish: 5 mils Powder Coat
Hardware: Stainless Steel
Warranty: Standard Warranty is 5 years for Driver and LEDs

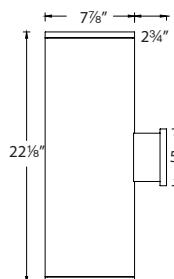
PRODUCT DIMENSIONS

LUMENS									
PART NUMBER	T2 LUMENS	T2 LM/W	T3 LUMENS	T3 LM/W	T4 LUMENS	T4 LM/W	T5 LUMENS	T5 LM/W	Watts
TBX-16L-175-30K	774	77	765	77	799	80	808	81	10
TBX-16L-175-40K	799	80	791	79	825	83	833	83	10
TBX-16L-175-50K	833	73	816	82	850	85	859	86	10
TBX-16L-35-30K	1547	91	1530	90	1598	94	1615	95	17
TBX-16L-35-40K	1598	94	1581	93	1649	97	1666	98	17
TBX-16L-35-50K	1666	98	1632	96	1700	100	1717	101	17
TBX-16L-53-30K	2366	91	2340	90	2444	94	2470	95	26
TBX-16L-53-40K	2444	94	2418	93	2522	97	2548	98	26
TBX-16L-53-50K	2548	98	2496	96	2600	100	2626	101	26
TBX-16L-7-30K	3185	91	3150	90	3290	94	3325	95	35
TBX-16L-7-40K	3290	94	3255	93	3395	97	3430	98	35
TBX-16L-7-50K	3430	98	3360	96	3500	100	3535	101	35
TBX-16L-1-30K	5096	91	5040	90	5264	94	5320	95	56
TBX-16L-1-40K	5264	94	5208	93	5432	97	5488	98	56
TBX-16L-1-50K	5488	98	5376	96	5600	100	5656	101	56



TUBE ARCHITECTURAL DS-WD08

LED Wall Mounts

**PRODUCT DESCRIPTION**

The latest energy efficient LED technology in an appealing cylindrical profile delivers accent and wall wash lighting. Comes in various light distribution and beam angle options.

FEATURES

- High performance exterior rated LED wall mount light
- Fixture can install upside down to alter light distribution
- Solid aluminum construction
- 5 year warranty

ORDERING NUMBER

Diameter	Watt	Beam Angle	Color Temp	CRI	Reference Output ¹ Lumen	Efficacy (lm/w)	Light Distribution	Finish
DS-WD08 8" 46Wx2		18°	S <i>Straight up and down</i>	927S 2700K 85	3080 x 2	15187	67x2	
				27S 2700K 85	3865 x 2	19064	84x2	
				930S 3000K 90	3275 x 2	16156	71x2	
				30S 3000K 85	3935 x 2	19387	86x2	
				35S 3500K 85	4030 x 2	19872	88x2	
				40S 4000K 85	4095 x 2	20195	89x2	
DS-WD0869 8" 34Wx2		25°	N <i>Straight up and down</i>	927S 2700K 85	3185 x 2	10536	68x2	
				27S 2700K 85	4000 x 2	13226	87x2	
				930S 3000K 90	3390 x 2	11208	74x2	
				30S 3000K 85	4070 x 2	13450	88x2	
				35S 3500K 85	4170 x 2	13786	91x2	
				40S 4000K 85	4240 x 2	14010	92x2	
		35°	F <i>Straight up and down</i>	927S 2700K 85	3015 x 2	5475	66x2	
				27S 2700K 85	3785 x 2	7211	82x2	
				930S 3000K 90	3210 x 2	6111	70x2	
				30S 3000K 85	3850 x 2	7334	84x2	
				35S 3500K 85	3945 x 2	7517	86x2	
				40S 4000K 85	4010 x 2	7639	87x2	
		N/A	F <i>Away from the wall</i>	927A 2700K 85	3020 x 2	N/A	66x2	
				27A 2700K 85	3790 x 2		82x2	
				930A 3000K 90	3210 x 2		70x2	
				30A 3000K 85	3855 x 2		84x2	
				35A 3500K 85	3950 x 2		86x2	
				40A 4000K 85	4015 x 2		87x2	
		N/A	F <i>Towards the wall</i>	927B 2700K 85	3020 x 2	N/A	66x2	
				27B 2700K 85	3790 x 2		82x2	
				930B 3000K 90	3210 x 2		70x2	
				30B 3000K 85	3855 x 2		84x2	
				35B 3500K 85	3950 x 2		86x2	
				40B 4000K 85	4015 x 2		87x2	
		N/A	F <i>One side each</i>	927C 2700K 85	3020 x 2	N/A	66x2	
				27C 2700K 85	3790 x 2		82x2	
				930C 3000K 90	3210 x 2		70x2	
				30C 3000K 85	3855 x 2		84x2	
				35C 3500K 85	3950 x 2		86x2	
				40C 4000K 85	4015 x 2		87x2	

DS-WD08- _____ - Example: DS-WD08-F930A-WT ¹Reference output shows 46W output. Multiply by 0.8 to determine output for 34W combinations

waclighting.com
Phone (800) 526.2588
Fax (800) 526.2585

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44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

WAC LIGHTINGFixture Type: Catalog Number: Project: Location: **SPECIFICATIONS**

Input:	Universal voltage 120V - 277VAC, 50/60Hz
Dimming:	Electronic low voltage (ELV) : 100% - 5% 0-10V: 100% - 1%
Light Source:	High output 3 Step Mac Adam Ellipse COB Rated life of 60,000 hours at L70
Finish:	Electrostatically powder coated, white, black, bronze and graphite
Standards:	IP65 rated, ETL & cETL wet location listed Title 24 JA8-2016 Compliant
Operating Temp:	-13°F to 122°F (-25°C to 50°C)

BK Black
WT White
BZ Bronze
GH Graphite

Stonco

by Signify

Floodlights

General purpose flood

FL20/40/80/150/200/300



The **Stonco General purpose floodlights** offer energy saving LED technology for long life and reduced maintenance. Versatile and stylish with five different sizes to choose from provides application flexibility for ground mount, wall mount, or pole mount installations. Ideal for sign lighting, building facades, security lighting, and general purpose floodlighting applications.

Project:		
Location:		
Cat.No:		
Type:		
Lamps:	Qty:	
Notes:		

Ordering guide

example: FL150-NW--G1-T-FL-8-BZ

Luminaire	LED Color	Generation	Options	Mounting	Distribution	Voltage	Finish
FL20 LED Floodlight 20W	NW Neutral White 4000K, 80CRI	G1 Generation	-- None PCB¹ With Photocell	K² Knuckle Mount 1/2" NPS male	FL Flood	8 120-277VAC	BZ Bronze
FL40 LED Floodlight 40W				T³ Trunnion Mount			
FL80 LED Floodlight 80W				S⁴ Slip Fitter Mount			
FL150 LED Floodlight 150W							
FL200 LED Floodlight 200W							
FL300 LED Floodlight 300W							

1. Photocell available with FL20, FL40, FL80, and FL150 only. Knuckle and Trunnion Mount only. 2. K Knuckle Mount only available with FL20 and FL40.
3. T Trunnion Mount only available with FL80, FL150, FL200 & FL300. 4. S Slip Fitter Mount only available with FL80, FL150, PFL200 & FL300.

LED Wattage and Lumen Values

Neutral White Ordering Codes	Total LEDs	LED Current (mA)	Color Temp. (K)	Average System Wattage ¹	Lumen Output ^{1,2}	Efficacy (LPW)
FL20-NW-G1-K-FL-8-BZ	32	500	4000	20	2122	109
FL40-NW-G1-K-FL-8-BZ	64	1100	4000	39	4433	113
FL80-NW-G1-T or S-FL-8-BZ	128	2450	4000	79	8856	113
FL150-NW-G1-T or S-FL-8-BZ	248	4200	4000	146	16,325	112
FL200-NW-G1-T or S-FL-8-BZ	340	1050	4000	197	24,254	123
FL300-NW-G1-T or S-FL-8-BZ	544	2100	4000	301	34,025	113

1. Wattage and lumen output may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature.

Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.

2. Lumen values based on photometric tests performed in compliance with IESNA LM-79.

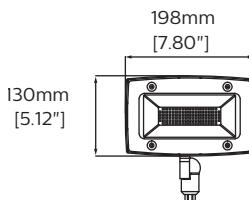
NOTE: Contact outdoorlighting.applications@philips.com for additional photometric tests or information.



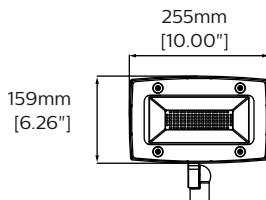
LED General purpose flood

FL20/40/80/150/200/300

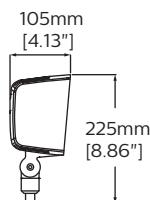
Dimensions



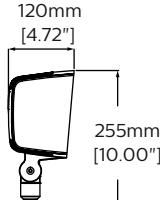
FL20-K Front



FL40-K Front



FL20-K Side



FL40-K Side

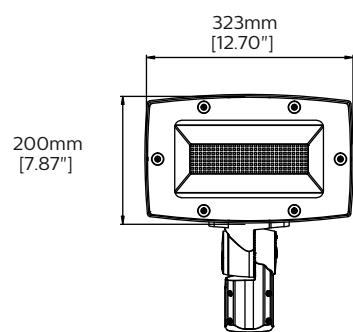
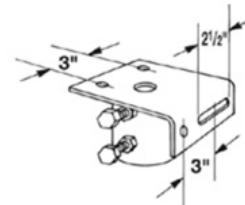
Accessory

(ordered separately,
field installed)

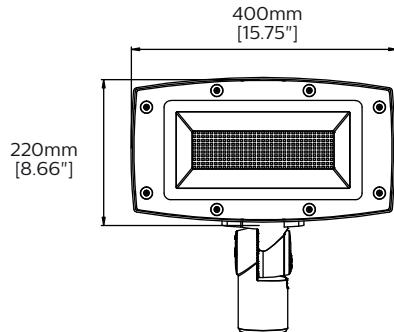


USF10BRZ

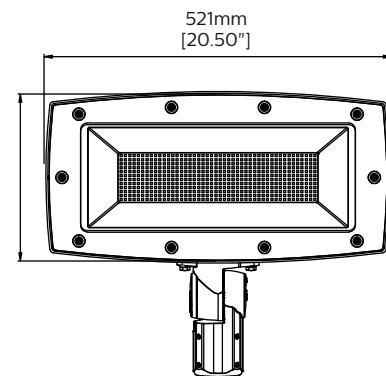
Mounting adapter for
trunnion, fits 2-3/8" O.D.
tenon, bronze finish.



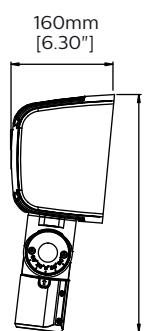
FL80-S Front



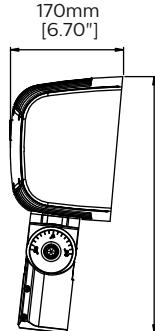
FL150-S and FL200-S Front



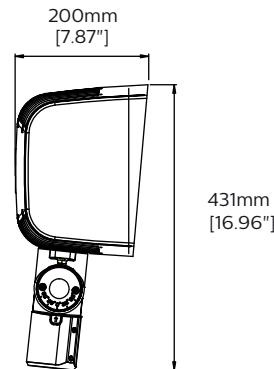
FL300-S Front



FL80-S Side



FL150-S and FL200-S Side

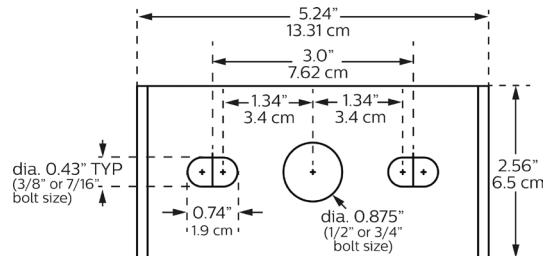
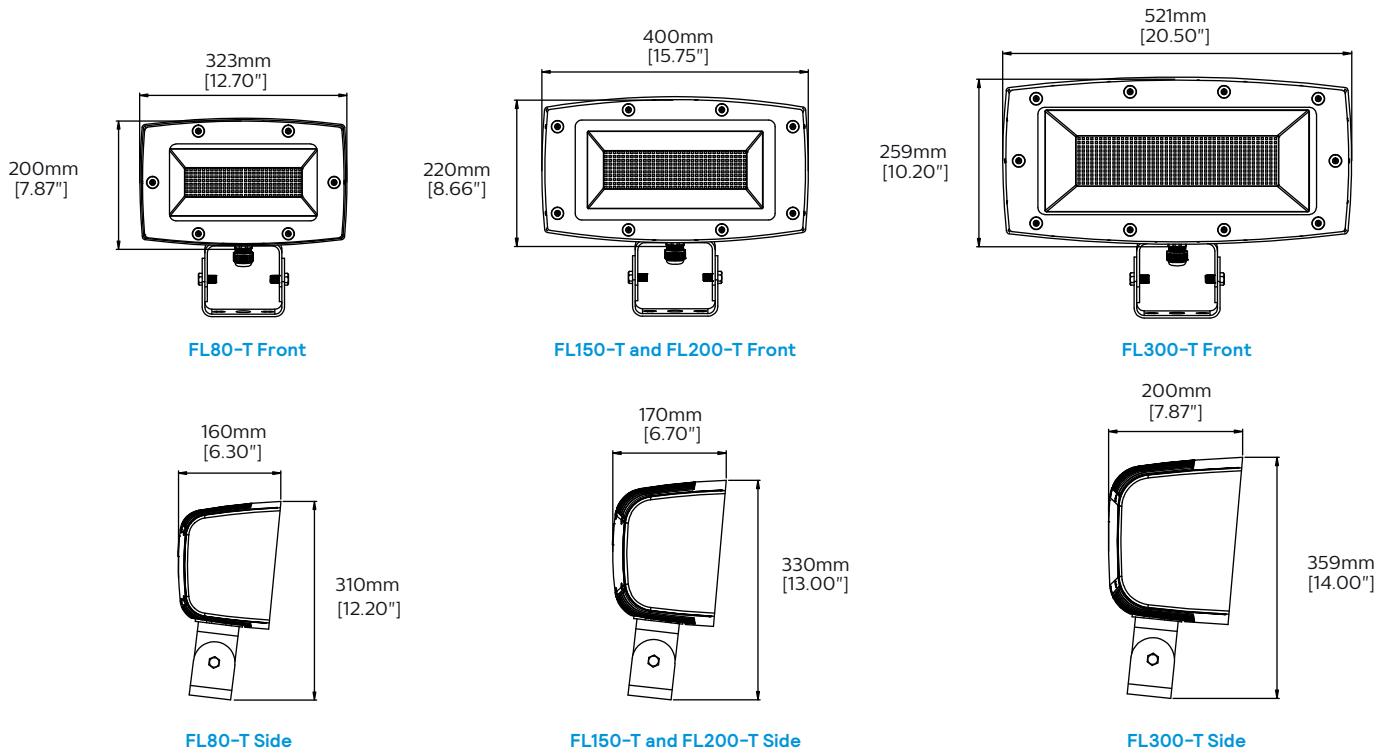


FL300-S Side

LED General purpose flood

FL20/40/80/150/200/300

Dimensions (continued)



Trunnion Mount Bolt Pattern

EPA and Weight

Product	Effective Projected Area (EPA-ft ²)			
	0° Aim	45° Aim	90° Aim	Weight
FL20-K	0.238	0.271	0.316	4.6lbs (2.09kg)
FL40-K	0.351	0.415	0.500	6.6lbs (2.99kg)
FL80-T	0.595	0.680	0.798	15lbs (6.8kg)
FL150-T	0.784	0.915	1.089	21.3lbs (9.7kg)
FL200-T	0.784	0.915	1.089	21.7lbs (9.8kg)
FL300-T	1.199	1.369	1.604	33.6lbs (15.2kg)
FL80-S	0.595	0.760	0.899	13.7lbs (6.2kg)
FL150-S	0.784	0.994	1.170	20.9lbs (9.5kg)
FL200-S	0.784	0.994	1.170	21.1lbs (9.6kg)
FL300-S	1.199	1.449	1.649	33lbs (15kg)

LED General purpose flood

FL20/40/80/150/200/300

Specifications

Housing and Heat Sink

Single piece die cast aluminum alloy. Housing also acts as a heat sink, designed to ensure high efficacy and superior cooling by natural convection. Air flow pattern always close to LEDs and driver optimizing their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling).

Mounting

Suitable for mounting within 4' (1.2m) of the ground.

Knuckle (K, see Ordering guide):

Integral die cast Aluminum adjustable knuckle (K) with $\frac{1}{2}$ " NPS male threads, with locking teeth and bolt to lock in aiming angle. Ships fully assembled, ready to install. Six inch (6" or 152mm) leads exit out of Knuckle for field connections.

Trunnion (T, see Ordering guide): Integral structural steel adjustable trunnion (T) for direct surface mounting, painted for resistance to corrosion, with bolt to lock in aiming angle. Ships fully assembled, ready to install. Six foot (6' or 1.83m) watertight STW 16 gauge cord exits out of Housing for connection by others, IP66 liquid tight connector to seal cord exit point.

Slip Fitter (S, see Ordering guide): Integral die cast Aluminum adjustable slip fitter (S) fits 2-3/8" O.D. tenon, includes set screws for securing luminaire to tenon, with aiming angle markings and bolt to lock in aiming angle. Ships fully assembled, ready to install. Six inch (6" or 152mm) leads exit out of Slip Fitter for field connections.

Lens

Heat and impact resistant tempered glass lens with one piece silicone gasket surrounding the entire perimeter of the LED light engine and electronics compartment providing an IP66 seal. Lens secured with screws and recessed sleeve washers outside of gasket perimeter. Lens includes silk screen to help reduce glare and for aesthetic purposes.

Light Engine

Composed of 3 main components: LED Module / Optical System / Driver. Electrical components are RoHS compliant. LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines extrapolations in accordance with IESNA TM-21. Metal core substrate ensures greater heat transfer and longer lifespan.

LED Module

Composed of mid-power performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985 +/- 275K or 3710K to 4260K), CRI 80 Min.

Optical System

Flood distribution, optimized for target lumens and a superior lighting uniformity. Photometric performance shall be tested per LM-79 (IESNA) certifying its photometric performance and published in accordance with LM-63.

Driver

High power factor of 90% min. Electronic driver, operating range 50/60 Hz, Class 1 or Class 2.

Other Integrated Features

Surge Protection: Each luminaire is provided as standard with surge protector (SP1 or SP1HV) tested in accordance with ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground.

Wiring

Insulated internal wiring located inside the housing, silicone seals all places where wiring passes through openings including sealed going into the knuckle or exiting the luminaire for trunnion mount. Due to the inrush current that occurs with electronic drivers, recommend using a time delay or slow blow fuse to avoid unnecessary and unwanted fuse blowing that can occur with fast acting fuses.

Hardware

All exposed screws shall be stainless steel and/or corrosion resistant and captive. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish

Fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat textured bronze finish.

LED Products Manufacturing Standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with EC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Vibration Resistance

Knuckle mounts meet the ANSI C136.31 Luminaire vibration specifications for normal applications (1.5G). Slip Fitter mounts meet the ANSI C136.31 Luminaire vibration specifications for bridge/overpass applications (3G).

Certifications and Compliance

cULus Listed for Canada and USA. DesignLights Consortium qualified. Entire luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (+104°F).

IP66 Rating

Entire luminaire including light engine and driver/electrical compartment IP66 rated in all aiming positions including upward aiming floodlighting applications.

Limited Warranty

5-year limited warranty. See signify.com/warranties for details and restrictions. Visit our eCatalog or contact your local sales representative for more information.

Predicted Lumen Depreciation Data

Ambient Temperature °C	System Current	L ₇₀ per TM21 ^{1,2}	Lumen Maintenance @ 54,000hrs
25°C	4200 mA	>54,000	84%

1. L₇₀ is the predicted time when LED performance degrades to 70% of initial lumen output.

2. Calculated per IESNA TM 21-11. Published L₇₀ hours limited to 6 times actual LED test hours.



Visual - Floodlight Tool



Design Information

Project Name
Project Description

Your Name
Company Name
Your Phone
Your Email

Wednesday, August 12, 2020

Spacing Results

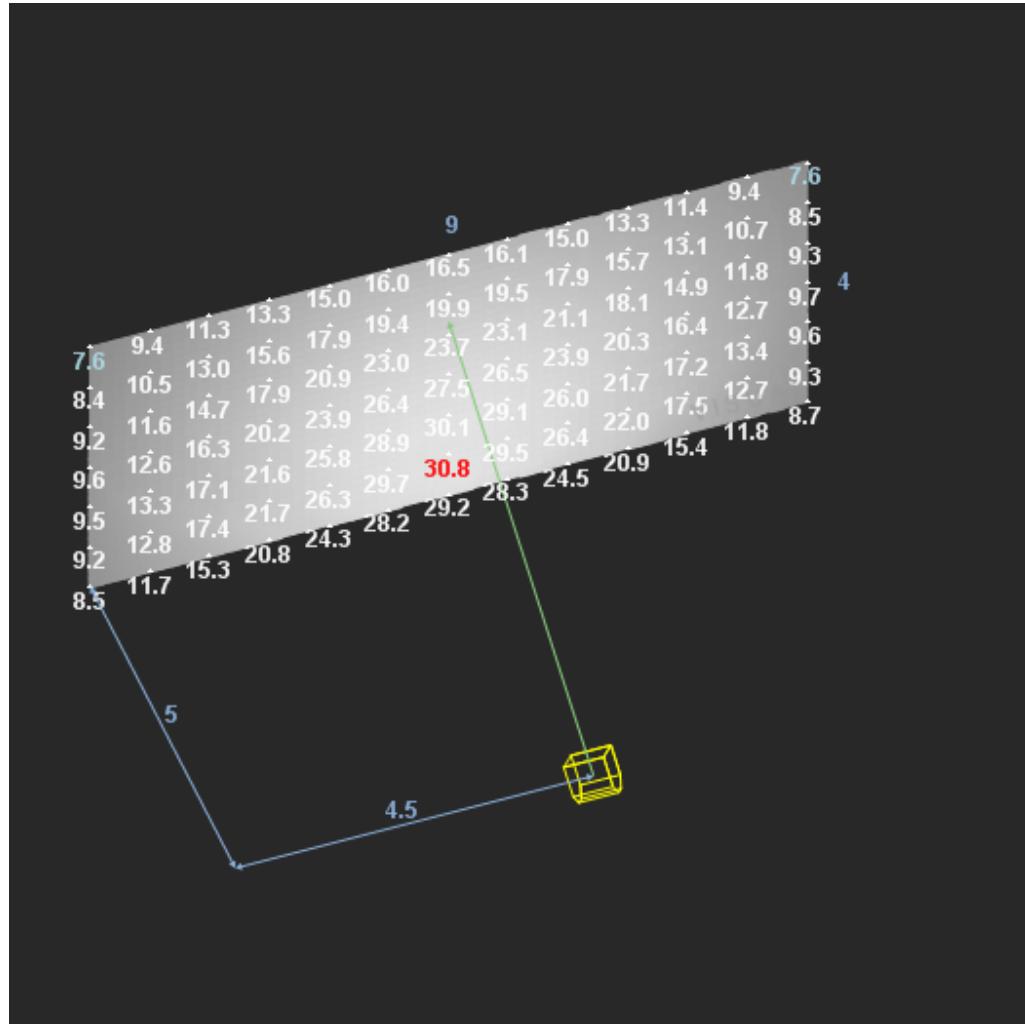
Spacing 9 ft
Quantity 1
Tilt 120°

Calculation Results

Minimum 7.6 fc
Average 17.5 fc
Maximum 30.8 fc
Ave / Min 2.3
Max / Min 4
Point Spacing .8 x .7 ft

Design Summary

Surface Width 9 ft
Surface Height 4 ft
Surface Base 0 ft
Setback 5 ft



SIGNIFY KEENE [A] - FL20-NW-G1-x-FL-8-BZ

No	Light Loss Factor Mounting Height	1 0 ft	Lamp Lumens Lamp Quantity	2114 1	Tilt Orientation	120° 0°	Wattage	19.5 Watts
Photo								
Available								

These lighting calculation results are for general informational purposes only and are provided without warranty as to accuracy, completeness, reliability or otherwise. Results are based on user provided data and data provided from publicly available sources; actual field conditions may affect calculated output. Visit www.Visual-3D.com.